

## Adiposis dolorosa

### Description

Adiposis dolorosa is a condition characterized by painful folds of fatty (adipose) tissue or the growth of multiple noncancerous (benign) fatty tumors called lipomas. This condition occurs most often in women who are overweight or have obesity, and signs and symptoms typically appear between ages 35 and 50.

In people with adiposis dolorosa, abnormal fatty tissue or lipomas can occur anywhere on the body but are most often found on the torso, buttocks, and upper parts of the arms and legs. Lipomas usually feel like firm bumps (nodules) under the skin. The growths cause burning or aching that can be severe, particularly if they are pressing on a nearby nerve. In some people, the pain comes and goes, while in others it is continuous. Movement or pressure on adipose tissue or lipomas can make the pain worse. In some cases, lipomas can impair normal movement.

Other signs and symptoms that have been reported to occur with adiposis dolorosa include easy bruising, digestive system problems, a rapid heartbeat (tachycardia), general weakness and tiredness (fatigue), sleep problems, depression, irritability, confusion, migraine headaches, recurrent seizures (epilepsy), and a progressive decline in memory and intellectual function (dementia). These problems do not occur in everyone with adiposis dolorosa, and it is unclear whether they are directly related to the condition.

### Frequency

Adiposis dolorosa is a rare condition whose prevalence is unknown. For reasons that are unclear, it occurs up to 30 times more often in women than in men.

### Causes

The cause of adiposis dolorosa is unknown. The condition is thought to have a genetic component because a few families with multiple affected family members have been reported. However, no associated genes have been identified.

Several other possible causes of adiposis dolorosa have been suggested, although none have been confirmed. They include the use of medications called corticosteroids, dysfunction of the endocrine system (which produces hormones), or changes in the deposition and breakdown of fat (adipose tissue metabolism). Researchers have also

suggested that adiposis dolorosa could be an autoimmune disorder, which occurs when the immune system malfunctions and attacks the body's own tissues and organs. However, there is no firm evidence that the condition is related to abnormal inflammation or other immune system malfunction.

It is unknown why adiposis dolorosa usually occurs in people who are overweight or have obesity, or why the signs and symptoms do not appear until mid-adulthood.

## **Inheritance**

Most cases of adiposis dolorosa are sporadic, which means they occur in people with no history of the disorder in their family.

A small number of familial cases of adiposis dolorosa have been reported. When the condition runs in families, it appears to have an autosomal dominant pattern of inheritance because affected individuals inherit the condition from one affected parent. This pattern of inheritance suggests that one copy of an altered gene in each cell is sufficient to cause the disorder.

## **Other Names for This Condition**

- Adiposalgia
- Adipose tissue rheumatism
- Anders syndrome
- Dercum disease
- Dercum's disease
- Dercum-Vitaut syndrome
- Lipomatosis dolorosa
- Morbus dercum

## **Additional Information & Resources**

### Genetic and Rare Diseases Information Center

- Adiposis dolorosa (<https://rarediseases.info.nih.gov/diseases/5750/adiposis-dolorosa>)

### Patient Support and Advocacy Resources

- Disease InfoSearch (<https://www.diseaseinfosearch.org/>)
- National Organization for Rare Disorders (NORD) (<https://rarediseases.org/>)

### Research Studies from ClinicalTrials.gov

- ClinicalTrials.gov (<https://clinicaltrials.gov/ct2/results?cond=%22adiposis+dolorosa%22>)

### Catalog of Genes and Diseases from OMIM

- ADIPOSIS DOLOROSA (<https://omim.org/entry/103200>)

### Scientific Articles on PubMed

- PubMed ([https://pubmed.ncbi.nlm.nih.gov/?term=%28%28adiposis+dolorosa%5BTIAB%5D%29+OR+%28Dercum\\*+disease%5BTIAB%5D%29+AND+english%5BLa%5D+AND+human%5Bmh%5D+AND+%22last+3600+days%22%5Bdp%5D](https://pubmed.ncbi.nlm.nih.gov/?term=%28%28adiposis+dolorosa%5BTIAB%5D%29+OR+%28Dercum*+disease%5BTIAB%5D%29+AND+english%5BLa%5D+AND+human%5Bmh%5D+AND+%22last+3600+days%22%5Bdp%5D))

### **References**

- Campen R, Mankin H, Louis DN, Hirano M, Maccollin M. Familial occurrence of adiposis dolorosa. *J Am Acad Dermatol.* 2001 Jan;44(1):132-6. Citation on PubMed (<https://pubmed.ncbi.nlm.nih.gov/11148491>)
- Hansson E, Svensson H, Brorson H. Depression in Dercum's disease and in obesity: a case control study. *BMC Psychiatry.* 2012 Jul 3;12:74. doi:10.1186/1471-244X-12-74. Citation on PubMed (<https://pubmed.ncbi.nlm.nih.gov/22759645>) or Free article on PubMed Central (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3416699/>)
- Hansson E, Svensson H, Brorson H. Review of Dercum's disease and proposal of diagnostic criteria, diagnostic methods, classification and management. *Orphanet J Rare Dis.* 2012 Apr 30;7:23. doi: 10.1186/1750-1172-7-23. Review. Citation on PubMed (<https://pubmed.ncbi.nlm.nih.gov/22546240>) or Free article on PubMed Central (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3444313/>)
- Herbst KL. Rare adipose disorders (RADs) masquerading as obesity. *Acta Pharmacol Sin.* 2012 Feb;33(2):155-72. doi: 10.1038/aps.2011.153. Review. Citation on PubMed (<https://pubmed.ncbi.nlm.nih.gov/22301856>) or Free article on PubMed Central (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4010336/>)
- Tins BJ, Matthews C, Haddaway M, Cassar-Pullicino VN, Lalam R, Singh J, Tyrrell PN. Adiposis dolorosa (Dercum's disease): MRI and ultrasound appearances. *Clin Radiol.* 2013 Oct;68(10):1047-53. doi: 10.1016/j.crad.2013.05.004. Epub 2013 Jun 25. Citation on PubMed (<https://pubmed.ncbi.nlm.nih.gov/23809264>)
- Wortham NC, Tomlinson IP. Dercum's disease. *Skinmed.* 2005 May-Jun;4(3):157-62; quiz 163-4. Review. Citation on PubMed (<https://pubmed.ncbi.nlm.nih.gov/15891252>)
- Yosipovitch G, DeVore A, Dawn A. Obesity and the skin: skin physiology and skin manifestations of obesity. *J Am Acad Dermatol.* 2007 Jun;56(6):901-16; quiz 917-20. Review. Citation on PubMed (<https://pubmed.ncbi.nlm.nih.gov/17504714>)

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